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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/492,913	01/20/2000	Anthony M Eaton	899.011US1	1549

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EXAMINER	
LAO, LUN S	

ART UNIT	PAPER NUMBER
2643	7

DATE MAILED: 06/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/492,913	EATON ET AL.	
	Examiner	Art Unit	
	Lun-See Lao	2643	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *24 March 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-5 and 15-72* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-5 and 15-72* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Introduction

1. This action is response to an election filed on 03-24-2004. Claims 1-5, 15-46, and 47-72 are pending.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-2, 15, 18-21, 24, 47 and 50-53, 56 are rejected under 35 U.S.C. 102(b) as being anticipated by Anderson (US PAT 5,721,783).

Consider claim 1, Anderson teaches a method comprising:

programming a hearing aid system using at least one mobile wireless communication inherently protocol (by communication with local area networking andsee col.26. lines 6-53).

Consider claim 2, Anderson teaches the programming includes programming the hearing aid system (see fig.2, 23) by a mobile device (28) (see col.27 lines 4-24);

Consider claim 15, Anderson teaches a system comprising: a hearing aid system (see fig.2); and a mobile device adapted to program the hearing aid system (see col.25 lines 15-50).

Consider claims 18-19 and 50-51, Anderson teaches that the system of the hearing aid system includes a hearing aid (see fig.2 and abstract); and the system of the hearing aid system (see fig.1) is capable of audio signal processing (16 and col.25 lines 15-50).

Consider claims 20-21 and 52 Anderson teaches that the system of the hearing aid system includes a hearing aid and a programming module adapted to communicate with the hearing aid, and wherein the programming module is adapted to communicate with the mobile deviceso as to receive at least one programming instruction from the mobile device to program the hearing aid (see col.25 lines 15-50); and the system of the programming module includes a headset (see fig.2, 28).

Consider claim 24, Anderson teaches that the system of the mobile device includes a mobile device selected from a group consisting of a digital cellular telephone, a personal digital assistant, and a personal communication and information device (see fig.2).

Consider claim 47, Anderson teaches a system comprising:

a hearing aid system (see fig.2); and

a terminal adapted to program the hearing aid system (see col.25 lines 15-50).

Consider claim 53, Anderson teaches that the system of the programming module includes a headset (see fig.2) that is capable of communicating ambient information (see col. 26 line 6-col.27 line 24).

Consider claim 56, Anderson teaches the system of the terminal is a data terminal (see figs.2and 5a-5b and col.11 line 19-col.12 line 46)

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 3-4, 16-17, 25-26, 48-49 and 57-58 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson (US PAT 5,721,783).

Consider claims 3-4, Anderson teaches that the programming includes programming the hearing aid system (such as DSP) by the mobile device that is adapted to communicate with a server (by networking system see col.26 lines 6-23); and the programming includes programming the hearing aid system by the mobile device that is adapted to communicate with a server (by networking system) through at least one network using the at least one mobile wireless communication protocol (see col.26 line 6-col.27 line24); but Anderson does not clearly teach to communicate with a server. However, Anderson does indicated that area networking and it is well known to have a server for a networking and therefore it would have been obvious that Anderson cloud have to communicate with a server for more convenient.

Consider claim 5, Anderson teaches that the programming includes programming a programming module (such as hearing parameter) coupled to the hearing aid system (see col.25 lines 15-50).

Consider claims 16-17 and 48-49, Anderson teaches that the system of further comprising (because by local area networking) a server adapted to communicate with the mobile device (see col.26 lines 6-53); and the system of further comprising at least one network to facilitate communications at least among the hearing aid system, the mobile device, and the server (see col.26 lines 6-53); but Anderson does not clearly teach to comprising a server. However, Anderson does indicated that area networking and it is well known to have a server for a networking and therefore it would have been obvious that Anderson cloud have a server for more convenient.

Consider claims 25-26 and 57-58 Anderson teaches that the system of the mobile device is adapted to inherently synchronize data with the server (by networking and see col.15 line 12-col. 17 line 10); and Anderson does not clearly teach to receive an upgraded audiological software from the server. However, Anderson does indicate to communicate with radio "base station" for local area networking, and it is well known in the art to download a software from a server and therefore it would have been obvious that Anderson to receive an upgraded audiological software from the server for improving the hearing aid performance.

6. Claim 22-23 and 54-55 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson (US PAT 5,721,783) in view of Shennib (US PAT 5,197,332).

Consider claims 22, 54 Anderson does not teach the hearing aid is capable of digital audio compression and decompression, and wherein the programming module is capable of digital audio compression and decompression.

However, Shennib teaches the hearing aid is capable of digital audio compression and decompression, and wherein the programming module is capable of digital audio compression and decompression (see col.6 line 62-col.8 line 25).

Therefore, it would have obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Anderson into Shennib to provide a unitary system for both testing of hearing and programming a programmable hearing aid. The system incorporates all of the necessary electronics and transducer components into a headset instrument to be worn by a patient.

Consider claims 23, 55 Shennib teaches the system of the programming module is capable of sending a test audio signal to the hearing aid so as to test at least one aural response of a patient (see col.7 line 22-col.8 line 29).

7. Claims 27-35 and 59-65 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson (US PAT 5,721,783) in view of Leppisaari et al. (US PAT 6,717,925).

Consider claims 27, 59, Anderson does not teach that the system of the mobile device is adapted to use a data service protocol selected from a group consisting of General Packet Radio Service (GPRS), High-Speed Circuit-Switched Data Service (HSCSD), Enhanced Data Rate for GSM Evolution (EDGE), Integrated Services Digital

Network (ISDN), Universal Mobile Telecommunications System (UMTS), and Cellular Digital Packet Data (CDPD).

However, Leppisaari teaches that the system of the mobile device is adapted to use a data service protocol selected from a group consisting of General Packet Radio Service (GPRS), High-Speed Circuit-Switched Data Service (HSCSD), Enhanced Data Rate for GSM Evolution (EDGE), Integrated Services Digital Network (ISDN), Universal Mobile Telecommunications System (UMTS), and Cellular Digital Packet Data (CDPD) (see col.5 lines 24-63).

Therefore, it would have obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Anderson into Leppisaari to provide a method of operating a mobile communication system supporting radio data transmission between a mobile station and a network in a number of different packet data protocols including a point to multipoint-multicast protocol, where the protocol is identified by a protocol indentifier transmitted between the network and the mobile station.

Consider claims 28-31 and 60-63 Leppisaari teaches that the system of , the at least one network includes a long range wireless network (see fig.2, (between MS and BSS); and the system of the long-range wireless network includes a long-range (see fig.2, (between MS and BSS) wireless network including a protocol selected from a group consisting of Global System for Mobile Communications (GSM), Code Division Multiple Access-One (cdmaOne), Time Division Multiple Access (TDMA), PDC, JDC, Universal Mobile Telecommunications System (UMTS), Code Division Multiple

Access-2000 (cdma2000), and Digital Enhanced Cordless Telephony (DECT) (see col.5 lines 24-63); and the system of the at least one network includes a short range network (see fig.2 (between MS and PC/PDA)); and the system of the short-range (see fig.2 (between MS and PC/PDA)) network includes a short range network selected from a group consisting of a radio communication network, an optical communication network, and a wired communication network (see col.5 lines 24-63).

Consider claims 32-33, and 64-65, Anderson teaches that the system of the optical (infrared) communication network (see fig.1) includes an optical communication network using Infrared Data Association (IrDA) protocol (see col.22 line 63-col.23 line 35); and the system of the hearing aid system is adapted to communicate with the mobile device wirelessly through the short-range network (see fig.2 (between 23 and 22).

Consider claims 34-35, Leppisaari teaches the system of further comprising an Internet coupled to the server (see fig.2); and the system of further comprising a gateway coupled to the at least one network and the Internet (see fig.2).

8. Claims 36-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson (US PAT 5,721,783) in view of Browning et al. (US PAT 6,707,581).

Consider claim 36, Anderson teaches interact with the hearing aid (see fig.2), but Anderson does not teach the system of further comprising at least one Java application Adapted to interact with the system, wherein the at least one Java application is adapted to be stored on the server.

However, Browning teaches the system of further comprising at least one Java application adapted to interact with the system, wherein the at least one Java application is adapted to be stored on the server (see col.6 line 69-col.7 line 12).

Therefore, it would have obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Anderson into Browning to utilize the information obtained by the handheld scanner to communicate via the internet through a browser program for retrieval of documents in a system.

Consider claims 37-40 Browning teaches the system of at least one Java application includes an applet (see col.2 lines 1-19); and the system of the applet is adapted to move from the server (see fig.6, 76) to the mobile device (70) so as to execute on the mobile device to interact with the system (see col.6 line 69-col.7 line 12); and the system of the applet is adapted to receive information from the server, and wherein the applet is adapted to transmit information to the server (see col.6 line 69-col.7 line 12); and the system of the mobile device includes a browser that is adapted to receive the applet to execute on the mobile device so as to interact with the system (see col.6 line 69-col.7 line 12).

9. Claims 41 and 66-71 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson (US PAT 5,721,783) in view of Knappe (US PAT 6,6061,431).

Consider claim 41, Anderson does not clearly teach that the system of the server includes a database that includes patient data, and audiological data associated with at least one hearing aid system.

However, Knappe teaches that the system of the server includes a database that includes patient data, and audiological data associated with at least one hearing aid system (see col.2 line 19-col.3 line10).

Therefore, it would have obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Anderson into Knappe to provide hearing compensation parameters stored in a searchable attribute database associated with a user's telephone number.

Consider claim 66, Anderson does not clearly teach the system of further comprising at least one distributed application adapted to interact with the hearing aid system, wherein the at least one distributed application is adapted to be stored on the server.

However, Knappe teaches the system of further comprising at least one distributed application adapted to interact with the hearing aid system, wherein the at least one distributed application is adapted to be stored on the server (see col.2 line 19-col. 3line 10).

Therefore, it would have obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Anderson into Knappe to provide hearing compensation parameters stored in a searchable attribute database associated with a user's telephone number.

Consider claims 67-68 Knappe teaches the system of the at least one distributed application includes at least one object (such as for matching telephone number) that is capable of being distributed (see col.1 line 35-col.2 line 5); and the system of the at least one object (such as for matching telephone number) is adapted to move from the

server to the terminal so as to execute on the terminal to interact with the hearing aid system (see col.1line 35-col.2 line 5).

Consider claims 69-71, Knappe teaches that the system of the at least one object (such as for matching telephone number) is adapted to receive information from the server, and wherein the at least one object is adapted to transmit information to the server (see col.2 line 19-col.2 line 33); and the system of the terminal includes a software environment that is adapted to receive the at least one object (such as for matching telephone number) to execute on the terminal so as to interact with the hearing aid system (see col.1 line 36-col.2 line 5); and the system of the server includes a database that includes patient data (user's profile), and audiological data associated with at least one hearing aid system (see col.2 line 12-col.3 line 35).

10. Claim 43-46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson (US PAT 5,721,783) in view of Fazio (US PAT 6,590,986).

Consider claim 43, Anderson does not teaches the system of the personal communication and information device includes a CompactFlash module that is adapted to communicate with the hearing aid system.

However, Fazio teaches that the system of the personal communication and information device includes a CompactFlash module that is adapted to communicate with the hearing aid system (see abstract and fig.2).

Therefore, it would have obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Anderson into Fazio to provide a hearing aid programming interface that be lawfully used with computers of all types.

Consider claim 44 Anderson teaches the system of the digital cellular phone includes a custom interface module that is adapted to communicate with the hearing aid system (see col.26 line 6-col.27line 24).

Consider claims 45-46 Fazio teaches the system of the upgraded audiological software includes a piece of software to be executed on the mobile device (see figs. 1-2 and col.3 line 19-col.4 line30); and the system of the hearing aid system includes a hearing aid, and wherein the upgraded audiological software includes a piece of software to be executed on the hearing aid (see figs. 1-2 and col.3 line 19-col.4 line 30).

11. Claims 42 and 72 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson (US PAT 5,721,783) as modified by Leppisaari et al. (US PAT 6,717,925) as applied to claims 15 and 31 above, and further in view of Boeson (US PAT 6,738,485).

Consider claims 42 and 72 Anderson and Leppisaari do not teache that the system of the radio communication network includes a network selected from a group consisting of HomeRF, DECT, PHS, WLA, and Bluetooth technology.

However, Boesen teaches that the system of the radio communication network includes a network selected from a group consisting of HomeRF, DECT, PHS, WLA, and Bluetooth technology (see col.2 line 59-col.3 line 11).

Therefore, it would have obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Anderson and Lappisaari into the teaching of Boesen to provide a communication system and method which limits radiation exposure.

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to Applicant's disclosure. Boesen (US PAT 6,094,492) is recited to show other related hearing aid system.

13.. Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:(703) 872-9306

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington. VA., Sixth Floor (Receptionist).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lao,Lun-See whose telephone number is (703) 305-2259 The examiner can normally be reached on Monday-Friday from 8:00 to 6:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Curtis Kuntz, can be reached on (703) 305-4708.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 whose telephone number is (703) 306-0377.

Lao,Lun-See
Patent Examiner

US Patent and Trademark Office
Crystal Park 2
(703305-2259

DUC NGUYEN
PRIMARY EXAMINER